

## SARAJEVO WINTER OLYMPICS

While the 14th Winter Olympic Games are racing to a close, the competition remains as close as ever, with the Olympians continuing to display mastery, fortitude and stamina. The hosts are working hard to keep the spirits of the sporting participants high offering them every hospitality and care.

One can boast of the greatest proficiency, along with super

electronic gadgetry and the like — but it's all to no avail if one fails to put one's heart and soul into the effort. TASS was told by Olympics honorary visitor Alexei Leontov, Pilot-Cosmonaut of the USSR and twice Hero of the Soviet Union. Here, in Sarajevo, we feel that all Yugoslav people identify themselves with the Games — resulting in truly excellent organization, he remarked.



Sharing the Olympic podium (left to right) — Bestemyanova and Bukin (USSR), Turvill and Dean (Britain) and Klimova and Ponomarenko (USSR).

## ICE DANCING: A STUNNING SHOW

IOC president Juan Antonio Samaranch awarded Jayne Torvill and Christopher Dean from Britain the gold, while the silver and bronze awards went to the Soviet pairs Natalya Bestemyanova and Andrei Bukin, and Marina Klimova and Sergei Ponomarenko.

The audience was filled to overflowing, and even the aisles were crisscrossed — so tough was the competition for the awards.

Up until the last minute the bronze medal remained in the balance, as Klimova and Ponomarenko threw down the gauntlet to experienced Americans Judy Blumberg and Michael Seibert, who were in the lead before the free dance section.

The young Muscovites (Marina is 17 and Sergei 23) breezed to the silver to a Kalman tune

thus crowning their Olympic debut.

Bestemyanova and Bukin danced nearly all their number to constant applause. Then came the turn of the triple world champions. Though controversial, their dancing Ravel's Bolero did not leave a single viewer sitting on his hands and won them nine perfect marks. The Nottingham couple are now planning to enter the world championships in Ottawa to crown their amateur career.

Triple world champion, Scott Hamilton of the USA, won the men's singles. Brian Orser of Canada, took the silver and Jozef Sabovik of Czechoslovakia, the bronze.

European champion, Alexander Fadeyev of the USSR, placed a poor seventh.

Yugoslav Jurij Franko hurtling to his giant slalom silver.



The best of friends off the ice: speedskating rivals, Gaetan Boucher of Canada, twice Olympic winner, and twice silver medalist, Sergei Khlebnikov of the USSR.



## First medal for hosts and an optimistic Senegalese

Jurij Franko, of Yugoslavia, has won the Olympic hosts their first medal to date, running up in the men's giant slalom, behind winner Max Julien, of Switzerland, who excelled on both runs. Third-placed in the Bjelesnica Mount contest was Andreas Wenzel, of Liechtenstein.

Remarkably, the field included even African skiers, who

did fairly well — Senegalese Lamine Gueye, for instance, finished 59th, ahead of 50 more seasoned giant slalom masters.

I lack the skills and experience to compete with the world greats, he noted, but hope sports fans in Senegal will soon be rejoicing at an Olympic award for a Senegalese Alpine skier the way Yugoslavs are at Jurij Franko's success.

## 'GOLDEN' RELAY

At long last the USSR biathlon squad has made amends for its poor showing at the Olympics. Dmitry Vasiliev, Yuri Kabakov, Aigimantas Shala and Sergei Bulygin won the 4x25 km relay in 1 hr 38 min 51.7 sec.

Second-placed Norway clocked 1:39:03.9 and West Germany finished next in 1:39:05.1.

## GDR CLEAR THE BOARD

The GDR made a clean sweep of the women's speedskating titles at the Sarajevo Olympics — two for Karin Enke and one each for Christa Rothenburger and Andrea Schöne.

This was to be expected, as in the past two years the GDR have dominated major international tournaments, said Rolf Steinhilber, head coach of the USSR women's squad. The GDR has a field of strong leading skaters. Between them, the GDR and its USSR shared all the 12 Sarajevo medals but the latter failed to get a single title, with only two bronzes to show for Petra Schafhauser and one for Natalya Stive (Gueye), from Konerovo.

## Debbie steals the show

Debbie Armstrong has triumphed in the women's giant slalom to win the first gold for the USA in Sarajevo. Her appearance was in doubt until the last minute, as she was only listed as a replacement by her National Olympic Committee.

## Two misses

Great skiing proficiency was Norwegian Erik Kvalfoss his Sarajevo 10 km cross-country biathlon title.

The 24-year-old college student missed twice in shooting but made up for the penalties by picking up speed.

I missed twice because I was going too fast, he noted. Last year Kvalfoss ran up in the world cup, and this winter finished third in the cup stage at Falun.

Aigimantas Shala, of the USSR, was close to an award but missed twice shooting standing upright and ultimately came in fifth.



## EDITORIAL BOARD

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## CANDIDATES TO THE SUPREME SOVIET MEET THEIR CONSTITUENTS

A very important event in the socio-political life of the Soviet Union — the elections to the Supreme Soviet of the USSR due to take place on March 4, 1984, are only two weeks away. Work committees have nominated candidate deputies to the Supreme Soviet, the highest organ of state power. The interests of working people will be mainly represented in Soviet parliament by factory workers and peasants, as well as by intellectuals.

At meetings all over this country, the electorate are meeting their candidates. These meetings, sponsored by various public organizations, help voters to know their would-be representatives better as well as providing them with an opportunity of voicing suggestions and proposals. Should a candidate be elected to the Supreme Soviet, he or she is bound to carry out all the proposals put forward by voters at election campaign meetings and rallies.

The Soviets represent a comprehensive mass political organization through which the working people exercise state power. Every Soviet citizen, each voter should be informed about the many-sided activities of the deputies. This is why canvassers and candidate deputies speak before the elections at voting stations and in voters' clubs at enterprises and in neighborhoods. They tell people about the most important events taking place in this country, about the changes that have occurred since the previous elections about plans for the future.

The almost 400-kilometre-long line will pass over the wide Yur'yevy Big, Dnieper and Danube rivers. The river banks will be straddled by pylons almost as tall as forty-storey buildings.

Romanian and Bulgarian builders have also started work on the line.

## FRIENDSHIP POWER TRANSMISSION LINE

A new high-voltage transmission line running from the Yuzhno-Ukrainskaya atomic power plant in Dobruja in Bulgaria, will improve power supply to the south of the Ukraine, Moldavia, as well as to Bulgaria, Hungary and Romania. The foundations for the first pylons have been laid.

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For the past two weeks the attention of millions upon millions of sports fans around the world has been riveted on the 1984 Olympic competition in Sarajevo. Of the 39 available awards the majority went to the USSR and the GDR. The USSR gathered 25 medals (six gold, ten silver and nine bronze).

Finland, Sweden and the USA won four golds each. Overall Finland won 13 medals to Norway's nine, the USA and Sweden eight each and Czechoslovakia six.

The Olympic titles were shared by 11 nations — the USSR, the GDR, Finland, Norway, the USA, Switzerland, West Germany, Canada, Italy and Britain.

The next Winter Games are due to take place at Calgary, Canada, in 1988.



## Farewell to Sarajevo—Calgary ahoy!



Radiant gnat Vladimir Tretyak (left) and captain Vyacheslav Fetisov of the 1984 Olympics, winning Soviet ice-hockey gold.

## Triumph of the Olympic ideals

IOC President Juan Antonio Samaranch talks to a TASS correspondent:

Q: How do you assess the Sarajevo Games? Have they lived up to your expectations?

A: The 14th Winter Olympic Games will undoubtedly go down in history as the best of the past 60 years. Never since 1924 when the Winter Games were founded has the world witnessed such a striking sports gala or such unity between athletes. The entire Sarajevo Games were a graphic testimony to the triumph of Olympic ideals — the

ideas of peace, friendship and cooperation.

Q: Have the Sarajevo Olympics reflected the mounting popularity of winter sports to various countries?

A: Absolutely. The fact that the Games drew a record 40 nations is evidence of the growing popularity of winter sports. No one is surprised any longer to see Winter Olympics competitors from such hot African and Latin American countries as Senegal, Morocco, Mexico and Argentina... That winter sports

(Continued on page 8)



At the closing ceremony: Vucko the wolf cub, the Sarajevo Games mascot, in the company of the Polar bear cub, his successor at the next Olympics to be held at Calgary, Canada.

## NO PROBLEMS DESPITE LUGE SPILL

Moscow college students, Yevgeny Belousov and Alexander Belyakov, have won the two-man luge Olympic silver medal, coming home 0.04 sec behind winners, Hans Strangassinger and Franz Wembacher of West Germany, on the two run tour.

The Muscovites set out before the rivals in the decisive run, and had to take a few risks. They got off to a good start but the tenth, last-but-one turn proved the fatal one, as

the luge was too slow to make the straight and tipped on one side, forcing Belousov and Belyakov to exhibit all their dexterity to get it back on course losing at least 0.2 sec in the process.

The USSR managed to win two silver and one bronze in the men's luge events, while Soviet women luges failed to win any. Incidentally, the USSR started fostering the sport only 15 years ago.

## PODIUM

Alpine skiing, Men's giant slalom

1. Max Julien (Switzerland) — 2 min 41.18 sec

2. Jurij Franko (Yugoslavia) — 2:41.41

3. Andreas Wenzel (Liechtenstein) — 2:41.75

Speedskating, Men's 1,000 m

1. Gaetan Boucher (Canada) — 1 min 15.80 sec

2. Sergei Khlebnikov (USSR) — 1:16.53

3. Kai Arne Engelstad (Norway) — 1:16.75

Speedskating, Women's 3,000 m

1. Andrea Schöne (GDR) — 4 min 24.79 sec

2. Karin Enke (GDR) — 4:26.33

3. Gabi Schönbrunn (GDR) — 4:33.13

Biatlon, 10 km cross-country race

1. Erik Kvalfoss (Norway) — 30 min 53.8 sec

2. Peter Angerer (West Germany) — 31:02.4

3. Matthias Jacob (GDR) — 31:10.5

Cross-country skiing, Women's 4x5 km relay

1. Norway (Inger-Helene Nyström, Anne Jahren, Brit Pettersen, Berit Aunli) — 1 hr 6 min 49.7 sec

2. Czechoslovakia

3. Finland

Twinned luge

1. Hans Strangassinger and Franz Wembacher (West Germany) — 1 min 23.620 sec

2. Yevgeny Belousov and Alexander Belyakov (USSR) — 1:23.660

3. Jörg Hoffmann and Jochen Pietzsch (GDR) — 1:23.887

Alpine skiing, Men's downhill

1. Bill Johnson (US) — 1 min 45.59 sec

2. Peter Mueller (Switzerland) — 1:45.86

3. Anton Stenor (Austria) — 1:45.95

Women's downhill

1. Michèle Pignatelli (Switzerland) — 1 min 13.35 sec

2. Maria Walliser (Switzerland) — 1:13.41

3. Olga Charvatova (Czechoslovakia) — 1:13.53

Speedskating, Men's 1,500 m

1. Gaetan Boucher (Canada) — 1 min 58.36 sec

2. Sergei Khlebnikov (USSR) — 1:58.63

3. Oleg Bozhyev (USSR) — 1:58.89

Cross-country skiing, Men's 4x10 km relay

1. Sweden (Thomas Wassberg, Benny Kohlberg, Jan Ottosson, Gunde Swann) — 1 hr 55 min 06.3 sec

2. USSR

3. Finland

## A 'bronze' first go

Once on the podium they seemed oblivious of what was going on at the moment — Zintis Ekmanis from Riga and Vladimir Alexandrov from Krasnoyarsk, who placed third in the twin bob event. They were the first Soviet bobsledders ever to win Olympic medals.

The Soviet crew is an excellently well-knit duo, said Wolfgang Hoppe, who steered a GDR bob to the title. It is very rare in our sport to do so well after only three years of practice, he noted. His teammate Dietmar Schauerhammer stressed that he was amazed at the debutants' skill and their fine bob.

## FACTS AND EVENTS

© The draft of the American Federal budget for the 1985 fiscal year has earmarked 2,100 million dollars for the creation of laser, beam, anti-satellite and other types of space weapons.

© Despite differences in the socio-political systems of the Soviet Union and Argentina, the two countries hold common positions on a number of international issues, said the Argentine Vice-President Victor Martinez in an interview to the BAH news agency. On a global scale, common ground exists in Soviet and Argentine policies on such issues as the struggle for disarmament and defense, the achievement of equilibrium, and the preservation of peace and security.

© The Indian authorities are taking steps against separatist elements who have been organizing provocations in the state of Jammu and Kashmir. During the clashes, the police and the security forces arrested several hundred members of those groupings seeking to join Pakistan.

can nuclear missiles in Western Europe.

The Reagan administration is attempting to torpedo an international conference on the Indian Ocean and the Persian Gulf, an idea supported by the United Nations. It also ignores the Soviet Union's constructive proposals aimed at demilitarizing the Indian Ocean and converting it into a nuclear free zone.

It is the task of all the peoples of Asia and Africa and all the progressive forces on the planet to foil the hegemonist plans and military intrigues perpetrated by American imperialism.

## AAPSO CONCERNED AT GROWING U.S. PRESENCE

Cairo. An appeal to step up resistance to American aggression to the Indian Ocean and the Persian Gulf has been made by the Afro-Asian People's Solidarity Organization (AAPSO). The appeal is contained in the statement of the Organization's Permanent Secretariat released here at the start of the International Week of Action for turning this area into a zone of peace.

The statement notes with alarm that American military presence is growing rapidly in the Indian Ocean and the Persian Gulf where American bases are set up to accommodate the interventionist rapid deployment forces, and warships carrying nuclear weapons are amassed.

It is in this way that the United States and its NATO partners carry out their aggressive global strategy which has become particularly dangerous following the deployment of American

Managua. The United States continues its aggression against Nicaragua, shedding the blood of peaceful Nicaraguans civilians, said Humberto Ortega, the Nicaraguan Minister of National Defence.

Addressing a rally in the town of Masaya he said that the population of the border areas of Nicaragua is subjected to armed attacks almost every day by mercenary Somozaist groups based in Honduras

to provoke the population's discontent at its material difficulties, he said. However, the Nicaraguans are well-aware that the country's economic problems are caused by American subversive activities. Our people realize that despite the armed and economic aggression, the Nicaraguan Government continues to carry out its progressive reforms including a number of social reform programmes to benefit the public at large.

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# THE WORLD

## Reprisals in Guatemala

San José. The secret police of the bloody Guatemalan regime, which faithfully serve the US puppet, dictator Mohlia, kidnap the country's progressive political and public figures and submit them to harsh torture. Even Colonel Boida la Cruz, chief of the Guatemalan security service, was forced to admit this fact. Answering questions put by foreign newsmen he said that about 100 "subversive elements" were being detained "legally" in secret prisons belonging to the police. At one time all such persons were reported missing. In February 1984 alone, clandestine patriotic organizations in Guatemala registered 930 cases of flagrant violation of human rights in the country by the military clique.

## HUMAN RIGHTS DISCUSSED AT GENEVA

Geneva. The 40th session of the UN Human Rights Commission is considering the implementation in all countries of Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights.

The representatives of Senegal, India, Yugoslavia, Algeria and some other nations stressed that developed UN member-states ought to help accelerate the socio-economic development and raise the well-being of people in the developing nations. They should help them solve such problems as the fight against hunger, diseases, and poverty. They underscored the importance of the preservation of peace as a critical pre-condition for im-

plementation of human rights. The spokesman for the World Peace Council said that developed nations should give extensive economic assistance to developing states to raise their living standards. He stressed that not enough had been done in that area, pointing out that Western countries squander enormous resources on the arms race while cruelly exploiting developing countries where millions of people have no hope whatsoever of improving their living standards, receiving an education or gaining other social rights. 600,000,000 people in Africa, Asia and Latin America can neither read nor write, and 700,000,000 suffer from chronic malnutrition and hunger.

## MILITARY TO TAKE OVER AIR TRAFFIC CONTROL IN FRG

Bonn. The West German public are seriously alarmed and concerned at the military intention of establishing control over air space in the southern part of the country. According to the Progress Press-Agentur (PPA), Bundeswehr servicemen will take over total control of plane flights in southern West Germany from civilian air traffic personnel this spring. This "novelty" has been introduced following hectic ef-

forts by the Defence Minister, Manfred Wörner of the Christian Democratic Union, who has succeeded in bringing pressure to bear on the Ministry of Transport in Bonn in order to make it give up traffic control over civilian aircraft.

Bundeswehr has categorically refused to make use, even partially, of the services of civilian air traffic controllers. An offi-



Paving a little path... Drawing by Konstantin Rybakov

cial document released by the defence department on this issue, points out that these measures in the southern part of

## Washington attempts support for 'star wars'

London. The Washington administration continues to come up with plans for a system of "space weapons" based on the most up-to-date achievements in various technologies. At White House initiative, a series of secret meetings have been held between American emissaries with officials in Britain and other NATO countries in order to secure their support for the implementation of these dangerous plans and to offset the serious apprehensions felt in West European capitals over the consequences of Washington's preparations for "star wars".

According to "The Sunday Times", Western Europe was visited early in February by a "crack" team of officials from the Pentagon, the State Department, and the intelligence community from Washington who then set about brainwashing West European officials in the hope of convincing them of the "advantages" of continuing the arms race in space. In London, for instance, emissaries from Washington talked with some fifty officials representing the Foreign Office and the Ministry of Defence. The Americans praised the new space-based weapons system which they say will be operational in ten to fifteen years. "The Sunday Times" believes that the initial reaction among West Europeans was highly cautious.

## WHO'S BEHIND THE ANTI-POLISH CAMPAIGN?

Warsaw. The subversive activities of the anti-socialist underground in Poland is financed by the US Central Intelligence Agency. This was admitted by former director of the Polish section of Radio Free Europe, Nuwak. The Polish newspaper point out that the CIA has from the very beginning of the critical developments in Poland been maintaining close links with leaders of the "Solidarity" union, and orchestrated the slanderous anti-Polish campaign launched by the news media in the West. The CIA provides money for psychological war against Poland through the so-called "National Fund for Democracy" set up by the American secret services and also through the American AFL-CIO labour organization. These channels are being used to send hundreds of thousands of dollars to subversive groupings which are made up of reactionaries from the former "Solidarity" union. This CIA sinecure is also used to feed the so-called independent cultural workers who write socialist works, acting on orders from their Western masters.

The newspaper "Zolnier Wolnosci" reports that a few days ago, Radio Free Europe called on the former "Solidarity" leaders to continue their illegal activities promising them both generous rewards from the "National Fund for Democracy" and propaganda support from subversive radio stations.

This provocative appeal, which was broadcast through the CIA's mouthpiece, is described by the Polish newspapers as a cardit admission by the spy agency that it is continuing to help plots and intrigues against Poland, by financing and directing the actions of the anti-socialist underground in Poland.

## The truth about 'yellow rain'

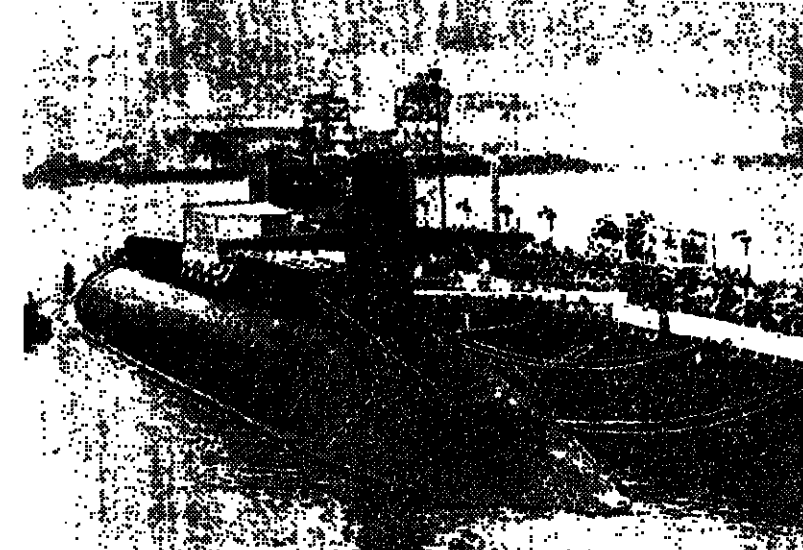
New York. The allegations made by the American administration about the use of "yellow rain" chemical weapons in Viet-nam are not based on fact and have not been substantiated by any scientific study. This was the conclusion reached in an article published by the authoritative American magazine, "Chemical and Engineering News".

Following a thorough examination of the circumstances under which the false report appeared the magazine concludes that "yellow rain" is natural in origin and has nothing to do with the use of chemical weapons. The American State Department has persistently tried to prove that the Soviet Union and its allies were using toxic agents in Laos and Kampuchea.

Without exception all the "samples" which the US State Department presented in order to confirm its accusations against the Soviet Union contained the same pollen. Proceeding from the descriptions and examination of "yellow rain" a group of authoritative American scientists, including Professor of Biology at the University of California, Professor of Harvard University, and others have come to the conclusion that this chemical is produced by bees.

As to the "testimony" given by the people who said they had "witnessed" and even been "victims" of the alleged chemical warfare in South-East Asia, the magazine points out that their information was contradictory and unconvincing.

# THE WORLD



USA. The American administration remains determined to continue the arms race. The "Georgie", a new nuclear missile submarine, was recently launched at a ship-building yard in New London, Conn., AP reports. This is the fourth Trident class submarine to be added to the US Navy.

Telephoto AP-TASS

## FACTS and EVENTS

Q The Council of State in Nicaragua has approved amendments to the constitution whereby the National Assembly, president and vice-president stand simultaneously for the forthcoming elections due in 1985. The National Assembly of 90 deputies will take two years to formulate the country's new constitution. Before the inception legislative and executive bodies are ready to start work their functions will be carried out by

the ruling council of the Government of National Reconstruction of Nicaragua.

Q Vienna is now the venue for the 30th Session of the UN Commission of the Status of Women, which is being attended by 32 Commission member-states, among them the USSR and the Ukrainian SSR, as well as observers from several specialized UN bodies, non-government organizations and national liberation movements. The Commission is looking into the role played by women in political and socio-economic life, in the drive for peace, détente and disarmament.

## Science and technology

### A ROTOR HEART

The human heart is actually a piston pump and a very perfect one which is a well-known fact. But it seems recent investigations have introduced serious doubts about this conviction: perhaps nature created its heart design because it did not know what the wheel was. And this is precisely the main element of the "rotor heart" suggested recently by engineer Gordon Jacobs from a clinic in Cleveland. The blood is pumped by two centrifugal pumps which replace the ventricles — those peculiar pistons of the heart. A pump ensures the continuous circulation of blood in the body, creating a permanent "pressure". Naturally, there is no pulse since there is no systoles.

This unusual piece of engineering work aroused the interest of medical specialists. Firstly by the fact that it promises to considerably simplify the design of artificial heart apparatuses, but also artificial hearts themselves, which are now being developed in many countries and are meant for implanting into the human organism. There remains only one moving part in the design to perfect—a rotor with blades, which is revolved by means of an electric motor. Any apparatus that the blades of the rotor will impair the delicate blood cells were displaced by the very first experiments. The rotor heart functioned in the body of a calf for 99 days and did not produce any negative side effects.

### A SUNBATH IN WINTER

Welsh engineers have designed a spacious cabin of transparent plastic in which people can get a sun tan on sunny winter days. The lower part is made of porous material, comfortable to sit or lie on. The transparent dome lets in the sun's rays and keeps in the warmth.

## OF INTEREST

### Poor Arnold!

The national earthworm annual championship has been held in the Australian state of Victoria. An unusually large number of competitors took part — 135 worms, watched by an unusually large number of fans. Most of the "athletes" were picked up in nearby gardens not long before the beginning of the competition, but also competing were some veterans from last year's "championship". Some coaches were somewhat overzealous in preparing their charges for the start. One rubbed his worm as

## FROM THE SOVIET PRESS

### TO BAN BARBARIC WEAPONS

The Soviet Union considers that the question of non-proliferation of chemical weapons, their prohibition and the destruction of their stocks is highly topical now and should be resolved without delay, the newspaper KRASNAYA ZVEZDA points out.

It has been learnt, the newspaper notes further, that the governments of Britain and Italy have already consented to the stockpiling of American chemical weapons. Plans are under way to build another five underground chemical weapons depots on the territory of the FRG, including All-gau and Schwarzwald, where 19,000 tonnes of new binary toxic chemicals, binary munitions and 155 mm and 203.2 mm howitzers and aviation binary "big eye" bombs will be stockpiled.

The newspaper draws attention to the fact that it also plans to stockpile these components of chemical munitions and ground-based cruise and Lance missiles which are being deployed in the FRG. The USA has already set aside more than 18 million dollars for the construction of new depots.

### LEBANON'S TRAGEDY CONTINUES

The failure of yet another attempt by the US administration to seek a solution to the Lebanese crisis which would suit its interests via escalation of its armed interference has again confirmed the vain hopes which Washington and its allies are entertaining. These hopes, writes IZVESTIA, are linked with the intention to impose American-Israeli domination on Lebanon by inflicting all Lebanese efforts to reach national accord on the future constitutional structure of the state, as well as the necessary democratic transformations and the country's place in the Arab world. It is therefore hardly surprising that the main thrust of the US administration and the government in Tel Aviv is now concentrated on the unequal peace agreement with Israel imposed on Lebanon on May 17, last year.

In the meantime, the American naval armada is building up its strength all Lebanese shores. Even those Marines who are to be redeployed on the ships are poised to go back at the very first order. Washington and Tel Aviv are launching up a campaign of slander against Syria with renewed vigour. This is not the end of the affair, says the US Defense Secretary, Caspar Weinberger. The tragedy of Lebanon, the tragedy of the Arabs continues.

### PAYMENTS CENTRE

A multilateral system of payments and credits began to operate between the socialist countries two decades ago, writes the TRUD newspaper. To carry out these and other monetary operations, an International Bank for Economic Cooperation (IBEC) was established, whose membership includes Bulgaria, Hungary, Vietnam, the GDR, Cuba, Mongolia, Poland, Romania, the USSR and Czechoslovakia.

IBEC had initial capital of 305.3 million transferable roubles. Each country's share in the Bank's assets is determined in proportion to the size of its exports in the overall volume of reciprocal trade of the Bank member-countries. Regardless of their quota, however, in so far as concerns decisions within IBEC, each country has the right to one vote. For instance, the contributions of Bulgaria and Mongolia are only one-seventh and one-thirty-eighth, respectively, of that of the Soviet Union. Despite this, they have the same rights in the Bank as the USSR.

The volume of trade between socialist states is growing every year, with a corresponding growth being registered in the volume of operations carried out in IBEC, the payments centre of CMEA. For instance, while in 1964 the figure for the settlement of accounts operations was about 23 billion, by 1982 it had risen to 162 billion transferable roubles. The credit line opened by the Bank over the past twenty years amounted to 100 billion, with all IBEC member-countries using those credits.

### ROUGH FOR THE GENERAL

Lately, the rulers in Seoul have developed an irresistible urge for applying cosmetics. No amount of make-up is spared in making the regime of General Chun Doo Hwan more attractive. This regime is kept in power solely thanks to the use of troops, the police and American bayonets. A short while ago it was announced in South Korea with a great deal of pomp that a number of prisoners are to be pardoned under another amnesty, the newspaper SOVIETSKAYA ROSSIYA writes.

Who are those being pardoned? Most of them are common criminals. Only a tiny fraction are students and trade union activists who took part in mass demonstrations organized by South Koreans for democratic rights and freedoms. The price for this participation was high. The aim of the propaganda force involving the amnesty is clear — to water down the intensity of the people's struggle for democracy and against the ruling regime.

hard with oil and milk to secure better gliding, that he tore it in half, and as a result, it was disquieted from the race.

The one-metre race, won by Arnold, who improved on last year's record, ended in tragedy. For Arnold died of dehydration and the prize had to be awarded to his coach, a fourteen-year-old boy from Melbourne.

### Polly helps the law

Some people believe that parrots do not have the ability to remember what they have heard and then repeat it. You

can judge about this from a recent incident which occurred in the American town of Brighton.

A series of daring break-ins and robberies put the citizens and the police in turmoil. However, for a long time, no trace of the criminals could be found. One day, a husband and wife came to a police station. The couple, who had been robbed themselves, noticed that their parrot which had been a witness to the crime, began to say phrases which nobody had taught him! "Ray, Robert, come here", "Shake a leg, Ronny". Having picked up the names of the two criminals whose names were Robert and Ronny were shortly arrested.

## VIEWPOINT

Spartak BEGLOV

## A 1,000 million a day for war

Under the new budget President Reagan has come up with the USA will be spending 1,000 million dollars for armaments and the armed forces daily, which equals the GNP of some small countries in Africa or Asia.

Each new day will bring with it

- either one MX ballistic nuclear missile (40 over the year);
- or one of the latest B-1B bombers capable of carrying up to 20 cruise nuclear missiles (a total of 31);
- or one missile ship (altogether 34);
- or one F-15 (F-16) fighter-bomber (a total 198);
- or a Trident submarine capable of carrying 24 nuclear rockets equalling the power of

nearly 200 Hiroshima atomic bombs (one sub a year);
- or a dozen advanced nuclear charges for warheads for the "modernised" American arsenal of war;
- or one Pershing or cruise missile for "limited" nuclear warfare in Europe.

Such is America's material contribution in the coming year. All the rest that the US administration is using to allay the fears of millions of people are only empty words. In fact the production of words on "peace" in this election year will be in direct proportion to the accelerated production of nuclear weapons. Characteristically, shortly before voting his readiness for a dialogue with the USSR President Reagan sanctioned more tests of anti-satellite weapons, approving a nearly 20 per cent rise in

military expenditures in the same breath.

Each of these rises fears gaping holes in the smoke screen of words on "US commitment to arms reductions". In other words, President Reagan leads us to understand that while he is capable of uttering numerous words on "peace" he is incapable of just one thing — halting the accelerating arms race, much less putting it in reverse. It is hard to understand how this could prompt Moscow's return to the nuclear arms negotiating table.

Every word of his military budget is conclusive evidence of why America has been so doggedly stonewalling Soviet disarmament initiatives. In the past three years alone the USSR directly offered the USA for — stop development of new

weapons of mass destruction; — finalize the tripartite talks on complete banning of all nuclear weapons tests; — introduce a moratorium on anti-satellite weapons tests;

— cut by a quarter the current strategic arsenals of the two powers;

— pledge not to be the first to use nuclear weapons, something that the Soviet Union has already done unilaterally;

— conclude a treaty between NATO and the Warsaw states on the non-use of any force, both nuclear and conventional, etc. in bilateral relations.

The USSR also made strong moves in Geneva to meet its partner halfway for a possible agreement on limiting armaments in Europe, only to find the talks blatted by American Pershing-2 and cruise missiles. The American reasons are obvious — successful talks would have stopped the war machine programmed for at least another decade of operation.

Attempts by the US administration over the past three years to broadcast the Soviet Union produced no results other than the serious erosion of West-East relations and global stability, as well as disrupted chances for a Soviet-American dialogue.

## Twelve injured after nuclear test in Nevada

San Francisco. At least 12 people were injured three hours after an unscheduled nuclear device had been exploded underground at a testing range in the American state of Nevada, where a chain nearly ten metres deep, 18 metres wide and 45 metres long opened up at the time when a group of experts were in the testing area.

An official spokesman for the

US Department of Energy maintained that the explosion had a yield of no more than 20 kilotonnes. According to a leading expert from the University of Nevada, the seismic tremors following the blast were as high as 4.5 points on the Richter scale. The scientist stresses that this shows that the yield was at least several times higher than was officially announced.

## FREEDOM PRISON

Buenos Aires. I spent over two years in a prison cell and through enough privation and suffering to last me several lifetimes. For months on end my comrades and I were subjected daily to monstrous tortures. As a result today the lives of many of them are in danger, said noted Uruguayan pianist Miguel Angel Estrella, who managed to escape by a miracle from an Uruguayan jail for political prisoners. He was talking to a correspondent of the Argentine "Humor" magazine.

Among the 500 inmates of the jail, which is located 80 kilometres from Montevideo and has

been given the cynical nickname Libertad (Freedom) by the military regime, are leaders of underground political parties and trade unions.

The military tribunals in the country have convicted over 5,000 people on charges of "subversive activities" since the 1973 coup.

Any reporting of the torture of prisoners at Libertad is liable to severe prosecution. The Uruguayan public organization "In the service of peace and justice" was banned by the authorities because it had reported the torture of a group of Communists arrested last June.



### Round the Soviet Union

● IN THE CITY OF UL'YANOVSK ON THE VOLGA, AN ILYUSHIN-86 AIR BUS HAS BEEN TURNED INTO A CLASS-ROOM in which flying classes will be given to students at the local training centre for civil aviation pilots, technical and traffic control personnel from CMEA countries. Experienced crews will instruct the trainees on how to handle the aircraft.

● AN ASSEMBLY LINE FOR DRILLING INSTALLATIONS HAS GONE INTO FULL PRODUCTION AT THE GEOMASH ASSOCIATION, in the Kursk Region of the Russian Federation. The modernization of some of the components of the drill, which is mounted on a lorry, has increased performance by one and a half times. Every year, the Geomash Association will produce eight hundred of these drilling installations intended for prospectors and oil workers.

● PHYSICISTS IN BYELORUSIA HAVE DESIGNED A NEW LASER, WHICH "SPECIALIZES" IN HOLOGRAPHY. Called Fotan, this quantum generator combining the advantages of the ruby and the gas laser, ensures proper lighting of the object of which a three-dimensional portrait is to be made. It will be of use in taking photographs of high-speed processes and in studying the behaviour of plasmas, the tensions appearing in materials, and the factors involved in the cutting of metals.

● A TRAINING CENTRE FOR LONG-DISTANCE CAPTAINS HAS BEEN OPENED AT THE ATLANTIKA FISHING ASSOCIATION IN THE BLACK SEAPORT OF SEVASTOPOL. Training facilities at the centre include a computer with a display unit, and a mock-up of a chart house. After only a few weeks on the course, seamen improve their navigation skills and carry out navigation operations to perfection. Every year, hundreds of navigators will be retained under the guidance of the electronic "teacher".

## RESTORATION OF ART WORKS

Our photos show restorers from Moscow, Latvia and the Ukraine at work. Every year, we restore thousands of works of art. Each Union republic has restoration workshops of its own. In the Russian Federation, the Ukraine and Uzbekistan these are actually major concerns with a budget running into many millions. The greater part of their finance comes from voluntary societies for the protection of historical and cultural monuments (all republics have such societies). Apart from individual membership fees, large



sums are received from collective members of the society. Restorers are trained at establishments of higher education in Leningrad, Tbilisi, Kiev and Vilnius, and at technical schools in other cities.

Whereas some 25 years ago there was only a very limited number of restorers in our country, today we are dealing with an industry involving the work of thousands of experts. These include art critics, artists, chem-

ists, physicists and biologists. In recent years they have discovered many masterpieces previously thought lost.

Great interest is shown in the USSR in the preservation and restoration of cultural and historical monuments. Of major importance in this respect was the Law on the Protection of Monuments and related articles of the new USSR Constitution.

- Restorers at work on the gilded stucco moulding decorating the foyer of the Lvov Opera and Ballet Theatre — one of the most beautiful buildings in the city.
- A portrait being given a new lease of life.
- The department of enamel and oil painting at the All-Union Restoration Research Institute in Moscow.



### The electric car: solving the problems

Minibuses, carrying out the work of route taxis, are being tested in Moscow. The 10-seater buses were made at the Riga Motor Works and run on electric traction. They do not contaminate the atmosphere nor contribute to noise pollution. This type of bus runs at a speed of 70 km/h which is quite sufficient in a city where the maximum speed limit is 60 km/h.

One charge of the battery is enough for the bus to run for about 40 km. Recharging is replaced by a change of battery, which takes only a few minutes.

Today electrically driven cars serving different purposes are being produced in the USSR, among them minibuses, small trucks and taxis. The Volg automobile plant, well known for its Lada baby car, is working on a model of an electric car by tests. It will run on silver-zinc batteries which will ensure a run of 100 km without any re-charge.

### IMPROVED ROAD SURFACING

New road surfacing has been successfully tested in the conditions of the hot Karakum desert in Central Asia. An additive increasing the surface resistance to heat was introduced on a road subject to heavy traffic.

The additive, made out of cotton tar — from cotton processing wastes, will become an obligatory component of cold asphalt concrete manufactured in Turkmenia (a republic in Central Asia).

Cold asphalt concrete is used here for building roads in the desert which are subsequently rolled since hot asphalt cannot be transported over long distances. However, cold asphalt becomes viscous in summer when road surfaces are heated by the sun to temperatures of 40°C, so even a small percentage of the new substance helps make the surface stronger and more durable.

### Places to visit



## The Dom Cathedral

As was the case many centuries ago, the gabled roofs and the domes of the churches in old Riga are reflected in the waters of the Daugava River. One of the most famous sights in the Dom Cathedral built in 1211, only ten years after the foundation of Riga itself. The city coat of arms bears the date 1201.

The building and reconstruction of the Cathedral went on for centuries, and therefore various styles such as Gothic, Renaissance, and Baroque, are reflected in its architecture.

Its numerous relics and the splendid stained windows made by masters from Riga, Dresden, and Munich, attract tourists from all parts of this country and from abroad.

Most of the visitors who flock to the Cathedral come to hear the concerts arranged there three times a week, and even more often in summer, by the Latvian Philharmonic Society.

At the time the organ of the Dom Cathedral was made — in 1884 — it was the biggest in the world. It has 6,288 pipes made of different types of wood and of metal, varying from 13 millimetres to ten metres in length. They are divided into 127 registers. It was restored after the war by experts from the German Democratic Republic. Thanks to its "romantic" registers which are no longer made anywhere in the world, the organ has very few equals in so far as concerns the quality of its sound.

### NEW TEXTBOOKS FOR INDIAN STUDENTS

Linguists from India and the Soviet Union have decided to join forces in order to produce textbooks of Russian for Indian students, and of the Indian languages of Urdu, Punjabi, and Marathi for Soviet institutes and universities. Included on the joint teams of authors are well-known Soviet scholars from the Institute of Asian and African Countries and the Pushkin Institute of the Russian Language in Moscow and prominent Indian experts.

The work comes under the programme of the joint Soviet-

Indian commission of textbook which this year is considerably expanding its sphere of activities.

Over the past twenty years of cooperation, 425 titles have been translated into English and published in the Soviet Union at the request of the Indian side. These are dictionaries, reference books, textbooks on mathematics, mechanical engineering, chemistry, medicine and other subjects. Over a million copies of these books have been published to date.

### A MASTER OF FOLK INSTRUMENTS

An exhibition of musical instruments made by the folk master, Nazir Nazirov, has opened in the House of Culture in the settlement of Ramil in Tajikistan. The exhibition includes having its own special timber, and particular clarity and fullness of sound.

The master believes that the instruments sound better when made from the wood of mulberry trees which have been standing for half a century. There are many such trees in the Ramil Gorge. Using his own tech-

nology, the master soaks the wood in water, and then processes and dries the timber. He also has another secret: when polishing his instruments, he never covers them with lacquer, as he believes this to be detrimental to the sound.

Visitors to the exhibition are given an opportunity not only to see the instruments on display, but also to play them. One of this year's school-leavers, Habibullo Nazirov, has emerged victorious in a contest for the best connoisseur and lover of Tajik national music.

### Science and technology

#### A PUMP-TYPE POWER STATION

A pump-type power station, depending for its operation on differences in temperature of the heat carrier, has been designed by scientists from the Turkmenian Republic.

Water brought to boiling point by the Sun converts liquid iron into steam. This turns the blades of a turbine producing electricity. Ice-cold water from a well turns from into a liquid state again. These cycles are repeated throughout the daytime.

The minipower station, twenty times as powerful as the solar batteries used in remote grazing grounds, can lift nearly seventy thousand litres of water in a day. This is enough to supply a flock of sheep with water and to irrigate a small tract of land. It generates sufficient power to provide electricity to a shepherd's settlement (television and household electrical appliances included).

#### THE VOLGA IS TO BECOME CLEANER

An Institute of Nature Protection in the basin of the Volga River has been set up in the Volgograd town of Tagilits. There are more than fifty million people living on the banks of Europe's longest river, and

hundreds of oil fields and petrochemical and engineering industries. The institute's task is to promote the protection of the Volga's waters from industrial pollution. The results of its research will be made use of in the protection of other Soviet rivers.

#### BLUE MAP OF THE DESERT

Hydrogeologists in Turkmenia have completed maps of the underground waters in the Karakum Desert.

It is the first time such work has been carried out on a republic scale. The complex have drawn on a large body of material accumulated over the past few years from the drilling of all sorts of wells. Most underground water in the republic is found in the mountainous areas and in the valley at the foot of the Kopet Dag Mountains, where the majority of fresh-water reserves are concentrated. Considerable resources of underground water have been located in the ancient delta of the Amudarya River, beneath the Lenin Karakum Canal and under the water works system in a zone of heavy irrigation.

The hydrogeological maps will help improve utilization of water resources in the republic. In the construction of centralized systems of water supplies, and to irrigate farmland. More precise information about the reserves of underground water will make it possible to build running water supply systems and aqueducts in the arid part of the republic much faster and at considerably less expense.

### ECONOMIC DEVELOPMENT ON KAMCHATKA

Since time immemorial the Kamchatka Peninsula, in Soviet North-East Asia, has been a supplier of valuable furs. All species of Pacific salmon are found in its rivers. Nevertheless Soviet economists have plans to establish a large territorial-industrial complex on Kamchatka, for which the stocks of high-quality mineral coal, located in the southern, most developed part of the peninsula, will serve as a basis. Also found on Kamchatka are about 150 springs of native sulphur, as well as deposits of tin, mercury, limestone and other minerals. In the current five-year plan period (1981-1985) it is planned to increase industrial output on Kamchatka by almost 25 per cent. The authors of an ecological-economic model for the peninsula, however, suggest that some industrial projects which may endanger environmental protection measures be reconsidered. It is recommended, for instance, that the development of oil fields be abandoned since the peninsula's oil- and gas-bearing structures lie in zones having rich stocks of fish. A careful approach to the construction of hydropower stations which will dam spawning rivers is also required. The construction of geothermal stations, it is stated, will cause the least damage to nature on the peninsula. The Pazhetskaya Station (11,000 kW), the first geothermal station in operation, providing heat for state farm hothouses.

A one-man show can now be seen at the Children's Art Gallery in Georgia, a Soviet Transcaucasian republic. The artist is Vika Elshakashvili, a first-form pupil from Tbilisi School No. 66. The gallery, which occupies an old building in Baratskhvili St., organizes exhibitions of the works of young Georgian artists. Avtandil Kiklandze, the gallery director, believes that Vika Elshakashvili (there are over 130 of her works on view) draws very imaginatively.

In the photos: the young artist Vika Elshakashvili.

● One of the gallery rooms.



### VIEWPOINT

#### EDUCATION AS REFLECTED IN STATISTICS

Lev BOBROV

Even the pure figures and "dry" information, such as those contained in a recently released USSR Central Statistical Board report on results for the economic and social development of this country in 1983, gain in interest and eloquence when subjected to comparative analysis.

Here is an example: today 155.3 million Soviet people have either a secondary (including incomplete) or higher education. To compare: this is almost ten times as many as in 1939. In the intervening forty-five year period the Soviet population increased by less than 45 per cent. In other words, it is changing qualitatively, noticeably faster than quantitatively, becoming en masse more and more educated, ready to assimilate new knowledge, and for further intellectual development.

Or to take another statistic: 87 per cent of all those employed in the national economy have either secondary (including incomplete) or higher education. In 1939, the equivalent figure was 12 — a difference of 75 per cent. Such is the measure of the improvement in the professional and overall cultural levels of our skilled workforce — the key to having a more job conscious, efficient and productive personnel capable of coping with the different tasks facing the country.

Having become the most educated nation in the world, the Soviet society has not lost its thirst for knowledge. The USSR Central Statistical Board reports that today there are 106 million Soviet students in the country. This amounts to 38 per cent of the population as against 25 in 1940.

In 1983, nearly 47 million people learnt new skills or improved their qualifications by attending refresher courses at their place of work, or at special institutes offering advanced training for doctors, teachers, and other professions. All these forms of training, which are free of charge and accessible to all, are being made available on an increasingly large scale. In addition, millions of employees are improving their general educational level by attending classes at extramural or part-time departments of universities, colleges and technical schools.

The Soviet economy has opted for intensive development, a transition which must be completed in the present decade. The restructuring of our national economy sets new demands on the training of skilled personnel, the foundations for which are to be laid already during school years.

For all its achievements, the system of education in the Soviet Union is in need of further improvement in response to the new requirements and opportunities afforded by Soviet society which has entered the stage of mature socialism.

"The Main Trends in the Reform of Secondary and Vocational Training Schools" is a draft reform drawn up by the CPSU Central Committee and put forward for nation-wide discussion which is to last two to three months.

In the course of one or two five-year plan periods, universal secondary education will be supplemented with universal training for jobs. It is stipulated in the draft reform:

"The reform in the main is to be carried out before 1990. It should have a favourable effect on the training of skilled personnel, and facilitate further development of the Soviet economy, culture, science and technology."

### FROM THE SOVIET PRESS

#### AUTOMATION IS OF CRITICAL IMPORTANCE

The automation of production, starting with machine tools, presses, lines and shops up to the comprehensive automation of plants, including the automation of designing and control, is a goal of critical importance for this country, writes IZVESTIYA. Its successful implementation, writes Academician A. Alekseyev, President of the Academy of Sciences of the USSR, can in the main be achieved in the current century.

Automation, in industry, with the exception of continuous processes, will raise productivity 2.5-fold and will release up to 50 per cent of the workforce in continuous processes. This will permit the country's production capacity to rise and will make more feasible the putting into operation of the now seemingly inconceivable technology.

Computer-aided research drastically saves time. In engineering, a designer can use a display unit to design a part and programme the machine tools involved for its processing. This renders all drafting fully redundant.

All this has already been attained in individual processes and there is no doubt of the possibility of mass use of such achievements.

The USA has shipped a strict embargo on exports of electronic technology and machinery to the Soviet Union believing that this will slow down or stop progress in this exceptionally important area. However we have independently achieved such difficult goals like the development of atomic and rocket technology without any assistance from abroad and in quite a short time, the article notes.

#### LATEST IN COMET RESEARCH

In the TRUD newspaper an ingenious theory on the emergence of living matter on this planet is outlined by astrophysicist Yevgeny Kaimakov. Current research into comets, he reckons, may soon produce spectacular finds.

Nine years ago Kaimakov argued that comet nuclei have even more complex organic compounds than the already discovered cyan and acetonitrile. But the presence of cyan compounds makes the emergence of amino acids, which go to make up protein, the origin of life, very likely. If such components are found in comets could they not be carriers of life? To prove his point, Kaimakov started a series of experiments which showed that key fragments of comets falling into the Earth's atmosphere quite could certainly carry frozen rough copies of living cells. Once in a suitable medium, say a warm pool, these could come to life. Comets may thus be an intelligent message to mankind from distant worlds, this being a very convenient way of transmitting biological information, the author contends. It is not impossible that at some time in the future people will use this comet "transportation" to settle far-off worlds in the same way as the Earth was once populated.

#### RENEWABLE SOURCES OF ENERGY

A. Makukhin, USSR Deputy Minister of the Power Industry and Electrification, writes in the SOTSIALISTICHESKAYA INDUSTRIYA newspaper about the potential of renewable energy resources and its use in the national economy.

In the near future, construction will be completed in the Crimea of a small experimental industrial solar power station, which will serve as a prototype for future huge ventures hundreds of times more powerful. On the list of priorities today is the construction of solar-and-fuel power stations which have a number of advantages compared with only solar or only fuel stations. In some of the European parts of this country the use of geothermal water looks promising. It is planned to build a geothermal heat-and-power station with a type of underground circulation system in the Stavropol Territory in the south of Russia and in Dagestan, the Northern Caucasus. Considerable reserves of geothermal energy could be tapped in the Far East, sufficient to meet the needs of the region over a number of decades. Which is why in addition to the stations already operating there, plans include another one rated at 200 megawatts.

As to the energy of tidal waves it is necessary to study all the possible ecological consequences following the construction of such stations. For many years, an experimental station running on the energy of tidal waves has been operating in the Kola Peninsula near the city of Murmansk. Although this project does not generate lot of electricity, new and larger power stations are being designed for construction on the coasts of the White Sea and the Sea of Okhotsk.

Developments in harnessing wind power show that it is possible to build installations rated at between 10 and 15 megawatts per unit even today, and in the future we may design stations rated at ten to fifteen thousand megawatts.

#### CHILDREN COME FIRST

In this country the government helps the family to raise and educate children and look after their health and well-being, writes the MOSKOVSKY KOMSOMOLTS paper. Various public organizations have joined efforts in the area of child care. For instance, trade unions concern themselves with children's recreation schemes. Last summer nearly 15,000,000 children stayed in 63,000 summer camps. Spending an term of 26 days in such a camp costs one hundred rubles, while half of the passes are free and the rest cost just 20 per cent of the actual total, the article emphasizes.

Most Soviet families use the services of 130,000 kindergartens and creches, which now accommodate over 16,000,000 preschool-age children. The government's share of their upkeep amounts to 80 per cent. The country's socio-economic development plans very graphically reflect its specific concern for children. The current five-year plan, for instance, has set aside over 8,000,000,000 rubles for the welfare of children. The government pays for medical consultations for women during pregnancy, as well as their stay in a maternity home and for services of children's doctors. Apart from partially paid leave until the child is one year old a mother receives a lump sum upon the birth of the first, second and third child. The article stressed that earlier such benefits were available only upon the birth of a third child. Women with small children now enjoy a longer paid leave.



